

REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the above amendments and the discussion below.

Applicants' invention, as defined by the method of independent Claim 1 and the apparatus of independent Claims 18 and 20, concerns an improvement in the comfort of passengers in an airplane, and particularly those who are positioned next to a window or "window section" of an airplane. The improvement involves a coating material applied to the interior surface of the airplane wherein this coating material has a low thermal emission coefficient which provides reflection of heat from the inside environment. More particularly, the heat of the passenger is reflected back to the passenger so that the surface, with the coating, does not emit radiation primarily as a function of its surface temperature.

Claims 1-4, 16-20 and 22 have been rejected under 35 U.S.C. § 102 as anticipated by the reference to Yoneda et al., U.S. Patent No. 5,976,702, with an indication being given that this reference discloses applying a heat-reflective coating to an interior surface of a cabin of an aircraft as indicated at lines 19-24, column 1. The coating was stated to be capable of direct radiation exchange with a passenger.

Applicants respectfully submit that independent Claims 1, 18 and 20 provide method steps and structure which are not available from the reference to Yoneda et al.

The reference to Yoneda et al. concerns a composition for surface treatment which improves the surface's ability to be cleaned. In other words, the '702 reference provides a composition which allows the surface to have an improved resistance to dust, soil and water or, alternatively, to allow such material to be easily removed.

There is no indication that such a material has a low emission coefficient, and furthermore there is no indication in Yoneda et al. that the coating is applied to an interior surface of a cabin of a passenger airplane. The rejection makes reference to lines 19-24 of column 1 for supporting the rejection. However, this section indicates that the surface of an exterior part of transportation equipment such as "automobiles, ships, or aircraft" is coated with the material of the '702 reference.

Therefore, there is no indication that the coating material of the '702 reference is a low thermal emission coefficient material or that it is a heat-reflecting coating or that it is applied to the interior surface of a cabin of a passenger airplane or that it provides improved radiation exchange with a passenger in the airplane cabin. Each of these features are a part of each of independent Claims 1, 18 and 20.

Claims 1, 2, 7, 9 and 16-22 have also been rejected under 35 U.S.C. § 102 as anticipated by the reference to Coleman, U.S. Patent No. 4,731,289, based on a discussion at column 3, lines 60-62.

Applicants respectfully traverse this rejection on the grounds that the reference to Coleman is concerned with applying a coating for plastics which is abrasion resistant and that column 3, lines 60-62 indicates that the coated polycarbonate sheet is useful as an aircraft window with polyurethane coating on the inside surface. Obviously, the purpose of this structure at column 3, lines 60-62, is to prevent scratching of the inside surface of the window. In contrast to the presently claimed invention, the polyesterurethan material used as the abrasive resistant coating in Coleman has an emission coefficient approximately equal to one, whereas the present invention calls for a low thermal emission coefficient.

The material disclosed in Coleman absorbs infrared radiation and does not reflect infrared radiation as does the coating of the present invention. Therefore, using such a material on the inside surface of the window will not provide the claimed invention.

Claims 5 and 6 are rejected under 35 U.S.C. § 103 as unpatentable over Yoneda et al. in view of Allemand et al., U.S. Patent No. 6,178,034, with Claims, 13, 14 and 15 being rejected over Yoneda et al., Allemand et al., and Fix et al., U.S. Patent No. 6,055,088. Claims 7 and 21 are rejected as obvious over the

reference to Yoneda et al., Claims 8 and 9 are rejected over Yoneda et al. in view of Allemand et al., and Claims 10-12 are rejected over Yoneda et al. and Rensch, U.S. Patent No. 6,092,915. Claim 8 is also rejected as unpatentable over Coleman et al. '289.

Applicants respectfully submit that the additional references add nothing toward meeting the claim limitations of the independent Claims 1, 18 and 20, from which each of the dependent Claims 2-17, 19, 21 and 22 depend from and contain the limitations thereof.

Applicants' amendments to Claim 1 have been made in order to address the Examiner's indication in the rejection of Claim 1 under 35 U.S.C. § 112 that the claim was indefinite because of the phrase "capable of direct radiation exchange." Although Applicants do not agree with this assertion, an amendment to Claim 1 now recites that the coating provides improved radiation exchange with a passenger in the airplane cabin. This language is sufficient to meet the requirements of 35 U.S.C. § 112 and does not affect the scope of the claimed protection.

Therefore, in view of the distinguishing features between the claimed invention and the references, which features are not shown or disclosed or made obvious by the references or their combination, Applicants respectfully request that this application containing Claims 1-22 be allowed and be passed to issue.

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If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket No. 080404.49983US).

Respectfully submitted,

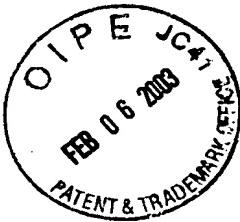
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please AMEND Claims 1, 18 and 20 as follows:

1. (AMENDED) A method of improving thermal comfort in a passenger airplane, the airplane having a cabin with interior surfaces, the airplane cabin for transporting one or more passengers, the method comprising:

applying a heat-reflecting coating with a low thermal emission coefficient to at least one interior surface of a cabin of a passenger airplane, whereby the coating [is capable of a direct] provides improved radiation exchange with a passenger in the airplane cabin.

18. (AMENDED) An airplane improved for thermal comfort, the improved airplane comprising:

an airplane comprising an airplane cabin having interior surfaces, a heat-reflecting coating with a low thermal emission coefficient on at least one of the interior surfaces,

whereby the coating is [capable of a direct] provides improved radiation exchange with a passenger in the airplane cabin.

20. (AMENDED) An airplane cabin part improved for thermal comfort, the improved part comprising:

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a part for use in an airplane cabin having at least one surface which, when the part is installed in the airplane cabin, provides the at least one interior surfaces of the airplane cabin,

a heat-reflecting coating with a low thermal emission coefficient applied to the surface,

whereby the coated surface, when the part is installed in the airplane cabin, [could have a direct] provides improved radiation exchange with a passenger.